

CLAIMS

What is claimed is:

Sub B1
09002646-010598

1 ~~1. A method for achieving high bit densities in a direct-sequence spread spectrum~~
2 communication system by using encoded spreading codes, the method comprising the steps
3 of:
4 creating a first encoded pseudo-noise code;
5 spreading a first signal by modulating the first signal with the first encoded pseudo-
6 noise code.

Sub C2
09002646-010598

1 ~~2. The method of claim 1, wherein the step of creating a first encoded pseudo-~~
2 noise code comprises the step of:
3 ~~modifying a first pseudo-noise code to create the first encoded pseudo-noise code.~~

1 3. The method of claim 2, wherein the first encoded pseudo-noise code is the first
2 pseudo-noise code with one bit inverted.

1 4. The method of claim 3 wherein the position of the one inverted bit of the first ~~2k~~
2 encoded pseudo-noise code corresponds to the value of the first signal.

1 5. The method of claim 2, wherein a second encoded pseudo-noise code is the
2 first pseudo-noise code with one bit inverted.

Sub A3
1 6. The method of Claim 3, further comprising the step of:
2 narrowing the first signal by demodulating the first signal with the first encoded
3 pseudo-noise code.

1 7. The method of claim 6 where the step of narrowing the first signal by
2 demodulating the first signal with the first encoded pseudo-noise code further comprises the
3 step of:
4 demodulating the first signal into a value corresponding to the position of the inverted
5 bit of the encoded pseudo-noise code.

1 8. The method of claim 1 wherein the first encoded pseudo-noise code
2 corresponds to a first user.

Sub A1
1 9. The method of claim 1 further comprising the step of:
2 storing a table of encoded pseudo-noise codes wherein the pseudo-noise codes are
3 orthogonal pseudo-noise code.

1 10. The method of claim 9 further wherein a second encoded pseudo-noise code
2 located in the table corresponds to a second user.

3

Add B2
Add C5